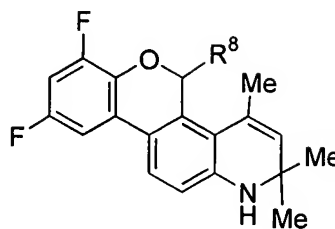


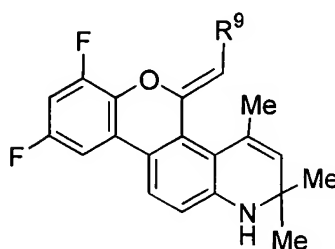
What is claimed is:

1. A compound of the formula:



(I)

5 or



(II)

wherein:

R^8 is selected from the group of C_1 – C_{12} alkyl, C_1 – C_{12} heteroalkyl, C_1 – C_{12}
10 haloalkyl, C_2 – C_{12} alkenyl, C_2 – C_{12} heteroalkenyl, C_2 – C_{12} haloalkenyl, C_2 – C_{12} alkynyl,
 C_2 – C_{12} heteroalkynyl, C_2 – C_{12} haloalkynyl, aryl and heteroaryl, optionally substituted
with one or more substituents independently selected from the group of hydrogen, C_1 –
 C_4 alkyl, F, Cl, Br, I, CN, NO_2 , NH_2 , $NHCH_3$, $N(CH_3)_2$, SH, SCH_3 , OH, OCH_3 , OCF_3 ,
 CF_3 , $C(O)CH_3$, CO_2CH_3 , $C(O)NH_2$, OR^{10} , SR^{10} , and $NR^{10}R^{11}$;

15 R^9 is selected from the group of hydrogen, F, Cl, Br, I, CN, C_1 – C_8 alkyl, C_1 – C_8
heteroalkyl, C_1 – C_8 haloalkyl, C_2 – C_8 alkenyl or cycloalkenyl, C_2 – C_8 heteroalkenyl, C_2 –
 C_8 haloalkenyl, C_2 – C_8 alkynyl, C_2 – C_8 heteroalkynyl, C_2 – C_8 haloalkynyl, aryl and

heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹;

5 R¹⁰ and R¹¹ each independently is hydrogen, or C₁–C₄ alkyl;

or a pharmaceutically acceptable salt or prodrug thereof.

2. A compound according to claim 1, wherein R⁸ is selected from the group of C₁–C₈ alkyl, C₁–C₈ heteroalkyl, C₁–C₈ haloalkyl, C₂–C₈ alkenyl, C₂–C₈ heteroalkenyl, C₂–C₈ haloalkenyl, C₂–C₈ alkynyl, C₂–C₈ heteroalkynyl, C₂–C₈ haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹.

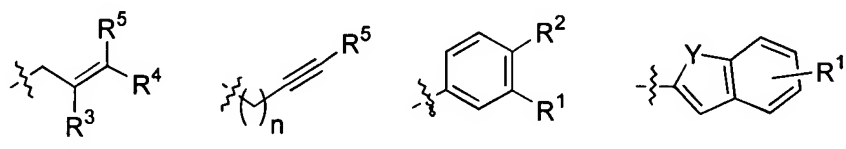
10

3. A compound according to claim 2, wherein R⁸ is selected from the group of C₁–C₄ alkyl, C₁–C₄ heteroalkyl, C₁–C₄ haloalkyl, C₂–C₄ alkenyl, C₂–C₄ heteroalkenyl, C₂–C₄ haloalkenyl, C₂–C₄ alkynyl, C₂–C₄ heteroalkynyl, and C₂–C₄ haloalkynyl.

15

4. A compound according to claim 2, wherein R^8 is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of hydrogen, C_1 – C_4 alkyl, F, Cl, Br, CN, NH_2 , $NHCH_3$, $N(CH_3)_2$, SH, SCH_3 , OH, OCH_3 ,
5 OCF_3 , CF_3 , $C(O)CH_3$, OR^{10} , SR^{10} , and $NR^{10}R^{11}$.

5. A compound according to claim 2, wherein R^8 is selected from the group of



R^1 and R^2 each independently is selected from the group of hydrogen, F, Cl, Br
10 and C_1 – C_4 alkyl;

R^3 through R^5 each independently is selected from group of hydrogen, F, Cl, and
 C_1 – C_4 alkyl;

n is 0 or 1; and

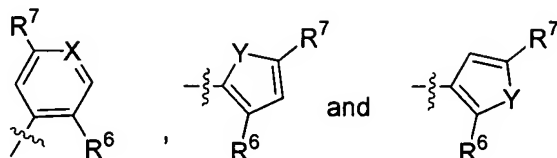
Y is selected from the group of O, S, and NR^{10} .

6. A compound according to claim 1, wherein R^9 is selected from the group of hydrogen, F, Cl, Br, CN, C_1-C_6 alkyl, C_1-C_6 heteroalkyl, C_1-C_6 haloalkyl, C_2-C_6 alkenyl or cycloalkenyl, C_2-C_6 heteroalkenyl, C_2-C_6 haloalkenyl, C_2-C_6 alkynyl, C_2-C_6 heteroalkynyl, C_2-C_6 haloalkynyl, aryl and heteroaryl optionally substituted with one or
5 more substituents independently selected from the group of hydrogen, C_1-C_4 alkyl, F, Cl, Br, I, CN, NO_2 , NH_2 , $NHCH_3$, $N(CH_3)_2$, SH, SCH_3 , OH, OCH_3 , OCF_3 , CF_3 , $C(O)CH_3$, CO_2CH_3 , $C(O)NH_2$, OR^{10} , SR^{10} , and $NR^{10}R^{11}$.

7. A compound according to claim 6, wherein R^9 is selected from the group of hydrogen, Br, Cl, C_1-C_4 alkyl, C_1-C_4 heteroalkyl, C_1-C_4 haloalkyl, C_2-C_4 alkenyl,
10 C_2-C_4 heteroalkenyl, C_2-C_4 haloalkenyl, C_2-C_4 alkynyl and C_2-C_4 heteroalkynyl, C_2-C_4 haloalkynyl.

8. A compound according to claim 6, wherein R^9 is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of
15 hydrogen, C_1-C_4 alkyl, F, Cl, Br, CN, NH_2 , $NHCH_3$, $N(CH_3)_2$, SH, SCH_3 , OH, OCH_3 , OCF_3 , OR^{10} , SR^{10} , and $NR^{10}R^{11}$.

9. A compound according to claim 6, wherein R⁹ is selected from the group
of



R⁶ is selected from the group of hydrogen, F, Cl, Br, C₁–C₄ alkyl, OR¹⁰, SR¹⁰,
5 and NR¹⁰R¹¹;

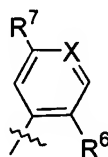
R⁷ is hydrogen, F, or Cl;

R¹⁰ and R¹¹ each independently is hydrogen, or C₁–C₄ alkyl;

X is CH or N; and

Y is selected from the group of O, S, and NR¹⁰.

10. A compound according to claim 9, wherein R⁹ is



R⁶ is selected from the group of hydrogen, F, Cl, C₁–C₄ alkyl, OMe, OEt,
NHMe, and NMe₂;

R⁷ is hydrogen, F, or Cl; and

X is CH or N.

11. A compound according to claim 9, where R⁶ is selected from the group of F, Me, Et, OMe, OEt, SMe, and NMe₂.

5 12. A compound according to claim 1, wherein said compound is selected from the group of:

7,9-difluoro-5(Z)-benzylidene-1,2-dihydro-2,2,4-trimethyl-5H-chromeno[3,4-f]quinoline (Compound 10);

10 7,9-difluoro-5(Z)-(2-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5H-chromeno[3,4-f]quinoline (Compound 12);

7,9-difluoro-5(Z)-(2-chlorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5H-chromeno[3,4-f]quinoline (Compound 13);

7,9-difluoro-5(Z)-(4-picolyidene)-1,2-dihydro-2,2,4-trimethyl-5H-chromeno[3,4-f]quinoline (Compound 14);

15 7,9-difluoro-5(Z)-(3-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5H-chromeno[3,4-f]quinoline (Compound 15);

7,9-difluoro-5(*Z*)-(4-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **16**);

7,9-difluoro-5(*Z*)-(2,5-difluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **17**);

5 7,9-difluoro-5(*Z*)-(2-methoxybenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **18**);

7,9-difluoro-5(*Z*)-(2-methyl-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-
5*H*-chromeno[3,4-*f*]quinoline (Compound **19**);

10 7,9-difluoro-5(*Z*)-(3-methyl-4-picolylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **20**);

7,9-difluoro-5(*Z*)-(2-methyl-3-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-
5*H*-chromeno[3,4-*f*]quinoline (Compound **21**);

7,9-difluoro-5(*Z*)-(3-methyl-2-picolylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **22**);

15 7,9-difluoro-5(*Z*)-(2,3-dimethylbenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **23**);

7,9-difluoro-5(*Z*)-cyanomethylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **24**);

7,9-difluoro-5(*Z*)-hexylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **25**);

7,9-difluoro-5(*Z*)-(2-methoxy-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **26**);

5 7,9-difluoro-5(*Z*)-(2,4,5-trifluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **27**);

7,9-difluoro-5-methylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **28**);

10 7,9-difluoro-5(*Z*)-bromomethylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **29**);

7,9-difluoro-5(*Z*)-(3-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **30**);

7,9-difluoro-5(*Z*)-(2-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **31**);

15 (±)-7,9-difluoro-5-methoxy-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **32**);

(±)-7,9-difluoro-5-phenyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **33**);

(±)-7,9-difluoro-5-(3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **34**);

(±)-7,9-difluoro-5-(1,3-benzodioxol-5-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **35**);

5 (±)-7,9-difluoro-5-(4-bromophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **36**);

(±)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **37**);

(-)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
10 chromeno[3,4-*f*]quinoline (Compound **38**);

(+)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **39**);

(±)-7,9-difluoro-5-(3-fluorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **40**);

15 (±)-7,9-difluoro-5-(3-chlorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **41**);

(±)-7,9-difluoro-5-(3-bromophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-*f*]quinoline (Compound **42**);

(±)-7,9-difluoro-5-(4-chlorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 43);

(±)-7,9-difluoro-1,2-dihydro-2,2,4,5-tetramethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 44);

5 (±)-7,9-difluoro-5-(2-oxo-2-phenylethyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 45);

(±)-7,9-difluoro-5-ethyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 46);

10 (±)-7,9-difluoro-5-ethenyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 47);

(±)-7,9-difluoro-5-(2-oxo-3-butenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 48);

(±)-7,9-difluoro-1,2-dihydro-α,α,2,2,4-pentamethyl-5*H*-chromeno[3,4-*f*]quinoline-5-ethanoate (Compound 49);

15 (±)-7,9-difluoro-5-ethynyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 50);

(±)-7,9-difluoro-5-cyano-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 51);

(±)-7,9-difluoro-5-butyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-
f]quinoline (Compound **52**);

(±)-7,9-difluoro-5-(2-thienyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-
f]quinoline (Compound **53**);

5 (±)-7,9-difluoro-5-(2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-
f]quinoline (Compound **54**);

(±)-7,9-difluoro-5-allyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-
f]quinoline (Compound **55**);

(±)-7,9-difluoro-5-[3-(trifluoromethyl)phenyl]-1,2-dihydro-2,2,4-trimethyl-5*H*-
10 chromeno[3,4-f]quinoline (Compound **56**);

Ethyl (±)-7,9-difluoro-1,2-dihydro- α -methylene-2,2,4-trimethyl-5*H*-
chromeno[3,4-f]quinoline-5-propanoate (Compound **57**);

(±)-7,9-difluoro-1,2-dihydro- β -methylene-2,2,4-trimethyl-5*H*-chromeno[3,4-
f]quinoline-5-propanol (Compound **58**);

15 (±)-7,9-difluoro-1,2-dihydro- β -methylene-2,2,4-trimethyl-5*H*-chromeno[3,4-
f]quinoline-5-propanol acetate (Compound **59**);

(±)-7,9-difluoro-5-(1-methylethenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
chromeno[3,4-f]quinoline (Compound **60**);

(±)-7,9-difluoro-5-(N-methyl-2-pyrrolyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **61**);

(±)-7,9-difluoro-5-phenylethynyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **62**);

5 (±)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **63**);

(-)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **64**);

(+)-7,9-difluoro-5-(benzo[*b*]thie-2yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-
10 chromeno[3,4-*f*]quinoline (Compound **65**);

(±)-7,9-difluoro-5-(5-methyl-2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **66**);

(±)-7,9-difluoro-5-(2-benzo[*b*]furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **67**);

15 (±)-7,9-difluoro-5-[4-(dimethylamino)phenyl]-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **68**);

(±)-7,9-difluoro-5-(5-methyl-2-thienyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **69**);

(±)-7,9-difluoro-5-(5-methoxy-2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **70**);

(±)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **71**);

5 (-)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **72**);

(+)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **73**);

10 (±)-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **74**);

(-)-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **75**);

(+)-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **76**);

15 (±)-7,9-difluoro-5-(4,5-dimethyl-2-furyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **77**);

(±)-7,9-difluoro-5-(2-methyl-1-propenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **78**);

(±)-7,9-difluoro-5-(3,4-dimethyl-2-thienyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **79**);

(±)-7,9-difluoro-5-(3-(3-bromophenyl)phenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **80**); and

5 7,9-difluoro-5-(2-methylbenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **81**).

13. A compound according to claim 1, wherein said compound is selected from the group of:

7,9-difluoro-5(*Z*)-benzylidene-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **10**);

7,9-difluoro-5(*Z*)-(2-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **12**);

7,9-difluoro-5(*Z*)-(3-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **15**);

15 7,9-difluoro-5(*Z*)-(2,5-difluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **17**);

7,9-difluoro-5(*Z*)-(2-methoxybenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **18**);

7,9-difluoro-5(*Z*)-(2-methyl-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **19**);

7,9-difluoro-5(*Z*)-(3-methyl-4-picolyldiene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **20**);

5 7,9-difluoro-5(*Z*)-(2-methoxy-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **26**);

7,9-difluoro-5(*Z*)-(3-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **30**);

10 7,9-difluoro-5(*Z*)-(2-thienylmethylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **31**);

(±)-7,9-difluoro-5-(3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **34**);

(-)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **38**);

15 (±)-7,9-difluoro-5-(3-chlorophenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **41**);

(±)-7,9-difluoro-1,2-dihydro-2,2,4,5-tetramethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **44**);

(±)-7,9-difluoro-5-allyl-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **55**);

(±)-7,9-difluoro-5-(3-trifluoromethylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **56**);

5 (±)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **63**);

(-)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **64**);

10 (+)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **65**);

(-)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **72**);

(-)-7,9-difluoro-5-(1-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **75**); and

15 7,9-difluoro-5-(2-methylbenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound **81**).

14. A compound according to claim 1, wherein said compound is selected from the group of:

7,9-difluoro-5(*Z*)-(2,5-difluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 17);

5 7,9-difluoro-5(*Z*)-(2-methyl-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 19);

7,9-difluoro-5(*Z*)-(3-methyl-4-picolyldiene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 20);

10 7,9-difluoro-5(*Z*)-(2-methoxy-5-fluorobenzylidene)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 26);

(-)-7,9-difluoro-5-(4-chloro-3-methylphenyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 38);

(±)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 63);

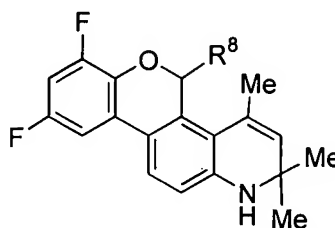
15 (-)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 64);

(+)-7,9-difluoro-5-(benzo[*b*]thien-2-yl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 65); and

(-)-7,9-difluoro-5-(2-propynyl)-1,2-dihydro-2,2,4-trimethyl-5*H*-chromeno[3,4-*f*]quinoline (Compound 72).

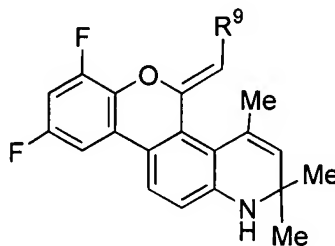
15. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of formula:

5



(I)

or



(II)

10

wherein:

R⁸ is selected from the group of C₁–C₁₂ alkyl, C₁–C₁₂ heteroalkyl, C₁–C₁₂ haloalkyl, C₂–C₁₂ alkenyl, C₂–C₁₂ heteroalkenyl, C₂–C₁₂ haloalkenyl, C₂–C₁₂ alkynyl, C₂–C₁₂ heteroalkynyl, C₂–C₁₂ haloalkynyl, aryl and heteroaryl optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹;

15

R⁹ is selected from the group of hydrogen, F, Cl, Br, I, CN, C₁–C₈ alkyl, C₁–C₈ heteroalkyl, C₁–C₈ haloalkyl, C₂–C₈ alkenyl or cycloalkenyl, C₂–C₈ heteroalkenyl, C₂–C₈ haloalkenyl, C₂–C₈ alkynyl, C₂–C₈ heteroalkynyl, C₂–C₈ haloalkynyl, aryl and heteroaryl optionally substituted with one or more substituents independently selected
5 from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹;

R¹⁰ and R¹¹ each independently is hydrogen, or C₁–C₄ alkyl;

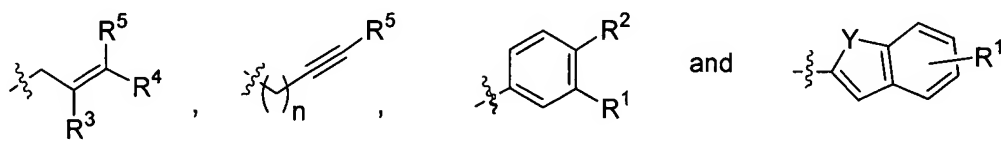
or a pharmaceutically acceptable salt or prodrug thereof.

10 16. A pharmaceutical composition according to claim 15, wherein R⁸ is selected from the group of C₁–C₈ alkyl, C₁–C₈ heteroalkyl, C₁–C₈ haloalkyl, C₂–C₈ alkenyl, C₂–C₈ heteroalkenyl, C₂–C₈ haloalkenyl, C₂–C₈ alkynyl, C₂–C₈ heteroalkynyl, C₂–C₈ haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br,
15 I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹.

17. A pharmaceutical composition according to claim 16, wherein R^8 is selected from the group of C_1 – C_4 alkyl, C_1 – C_4 heteroalkyl, C_1 – C_4 haloalkyl, C_2 – C_4 alkenyl, C_2 – C_4 heteroalkenyl, C_2 – C_4 haloalkenyl, and C_2 – C_4 alkynyl, C_2 – C_4 heteroalkynyl and C_2 – C_4 haloalkynyl.

5 18. A pharmaceutical composition according to claim 16, wherein R^8 is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of hydrogen, C_1 – C_4 alkyl, F, Cl, Br, CN, NH_2 , $NHCH_3$, $N(CH_3)_2$, SH, SCH_3 , OH, OCH_3 , OCF_3 , CF_3 , $C(O)CH_3$, OR^{10} , SR^{10} , and $NR^{10}R^{11}$.

10 19. A pharmaceutical composition according to claim 16, wherein R^8 is selected from the group of



R^1 and R^2 each independently is selected from the group of hydrogen, F, Cl, Br and C_1 – C_4 alkyl;

15 R^3 through R^5 each independently is selected from the group of hydrogen, F, Cl, and C_1 – C_4 alkyl;

n is 0 or 1; and

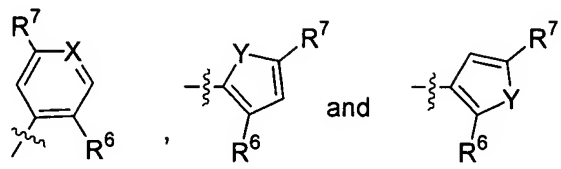
Y is selected from the group of O, S, and NR¹⁰.

20. A pharmaceutical composition according to claim 15, wherein R⁹ is selected from the group of hydrogen, F, Cl, Br, CN, C₁–C₆ alkyl, C₁–C₆ heteroalkyl, C₁–C₆ haloalkyl, C₂–C₆ alkenyl or cycloalkenyl, C₂–C₆ heteroalkenyl, C₂–C₆ haloalkenyl, C₂–C₆ alkynyl, C₂–C₆ heteroalkynyl, C₂–C₆ haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹.

21. A pharmaceutical composition according to claim 20, wherein R⁹ is selected from the group of hydrogen, Br, Cl, C₁–C₄ alkyl, C₁–C₄ heteroalkyl, C₁–C₄ haloalkyl, C₂–C₄ alkenyl, C₂–C₄ heteroalkenyl, C₂–C₄ haloalkenyl, C₂–C₄ alkynyl, C₂–C₄ heteroalkynyl, and C₂–C₄ haloalkynyl.

22. A pharmaceutical composition according to claim 20, wherein R⁹ is selected from the group of aryl and heteroaryl radicals, wherein said aryl and heteroaryl radicals are optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, CN, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹.

23. A pharmaceutical composition according to claim 22, wherein R⁹ is selected from the group of



R⁶ is selected from the group of hydrogen, F, Cl, Br, C₁–C₄ alkyl, OR¹⁰, SR¹⁰,
5 and NR¹⁰R¹¹;

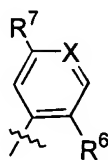
R⁷ is hydrogen, F, or Cl;

R¹⁰ and R¹¹ each independently is hydrogen, or C₁–C₄ alkyl;

X is CH or N; and

Y is selected from group of O, S, and NR¹⁰.

10 24. A pharmaceutical composition according to claim 23, wherein R⁹ is



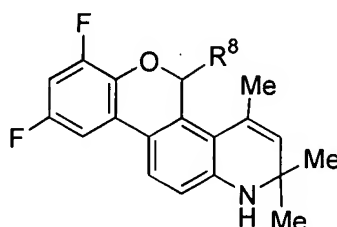
R⁶ is selected from the group of hydrogen, F, Cl, C₁–C₄ alkyl, OMe, OEt,
NHMe, and NMe₂; and

R⁷ is hydrogen, F, or Cl.

25. A pharmaceutical composition according to claim 23, where R⁶ is selected from the group of F, Me, Et, OMe, OEt, SMe, and NMe₂.

26. A method of treating an individual having a condition mediated by a progesterone receptor comprising administering to said individual a pharmaceutically effective amount of a compound according to any one of claims 1 to 14.

27. A method according to claim 26, wherein said compound is represented by formula (I):



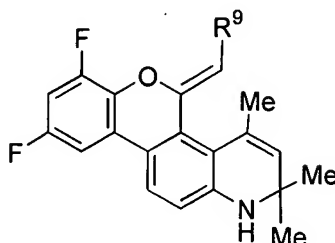
10 wherein:

(I)

R⁸ is selected from the group of C₁–C₁₂ alkyl, C₁–C₁₂ heteroalkyl, C₁–C₁₂ haloalkyl, C₂–C₁₂ alkenyl, C₂–C₁₂ heteroalkenyl, C₂–C₁₂ haloalkenyl, C₂–C₁₂ alkynyl, C₂–C₁₂ heteroalkynyl, C₂–C₁₂ haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹;

or a pharmaceutically acceptable salt or prodrug thereof.

28. A method according to claim 26, wherein said compound is represented by formula (II):



(II)

5 wherein:

R⁹ is selected from the group of hydrogen, F, Cl, Br, I, CN, C₁–C₈ alkyl, C₁–C₈ heteroalkyl, C₁–C₈ haloalkyl, C₂–C₈ alkenyl or cycloalkenyl, C₂–C₈ heteroalkenyl, C₂–C₈ haloalkenyl, C₂–C₈ alkynyl, C₂–C₈ heteroalkynyl, C₂–C₈ haloalkynyl, aryl and heteroaryl, optionally substituted with one or more substituents independently selected from the group of hydrogen, C₁–C₄ alkyl, F, Cl, Br, I, CN, NO₂, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, OH, OCH₃, OCF₃, CF₃, C(O)CH₃, CO₂CH₃, C(O)NH₂, OR¹⁰, SR¹⁰, and NR¹⁰R¹¹;

or a pharmaceutically acceptable salt or prodrug thereof.

29. A method according to claim 26, wherein said condition is selected from the group of dysfunctional uterine bleeding, dysmenorrhea, endometriosis, leiomyomas (uterine fibroids), hot flushes, mood disorders, meningiomas, hormone-dependent cancers, and female osteoporosis.

30. A method of modulating fertility in an individual comprising administering to said individual a pharmaceutically effective amount of a compound according to any one of claims 1 to 25.

31. A method of providing contraception in an individual comprising
5 administering to said individual a pharmaceutically effective amount of a compound according to any one of claims 1 to 25.

32. A method according to claim 26, wherein said condition is alleviated with female hormone replacement therapy.

33. A method of modulating a progesterone receptor in an individual
10 comprising administering a progesterone modulating effective amount of a compound according to any one of claims 1 to 25.

34. A method according to claim 33, wherein said modulation is activation.

35. A method according to claim 34, wherein said compound provides at least 50% maximal activation of the progesterone receptor at a blood plasma
15 concentration of less than 100 nM.

36. A method according to claim 34, wherein said compound provides at least 50% maximal activation of the progesterone receptor at a blood plasma concentration of less than 50 nM.

37. A method according to claim 34, wherein said compound provides at least 50% maximal activation of the progesterone receptor at a blood plasma concentration of less than 20 nM.

38. A method according to claim 34, wherein said compound provides at
5 least 50% maximal activation of the progesterone receptor at a blood plasma concentration of less than 10 nM.

39. A method of treating an individual having cancer comprising administering to said individual a pharmaceutically effective amount of a compound according to any one of claims 1 to 25.

10 40. A method of determining the presence of a progesterone receptor in a cell or cell extract comprising (a) labeling a compound according to any one of claims 1 to 25; (b) contracting the cell or cell extract with said labeled compound; and (c) testing the contracted cell or cell extract to determine the presence of progesterone receptor.